Résumé.

The following represents a résumé of the whole.

The experiments were divided into three classes. Experiments upon gunshot wounds with interference, experiments upon gunshot wounds without interference, and experiments upon separate organs.

Of the thirty-two experiments represented in the first class, seventeen ended in recovery and, omitting the second experiment, in which death followed almost immediately, the mortality amounts to 45.1%.

In all except four of the recognized fourteen that ended fatally death occurred either at the end of or during the first twenty-four hours following the operation.

In the excepted four the deaths occurred in one and a half, three, three and a half and four and a half days respectively after the operation. The mortality of the whole being dependent upon, two from hæmorrhage, 14.2%; five from shock primarily, 35.7%; six from sepsis, 42.8% (and one from shock consecutive to an operation for obstruction).

Although the end in view was not that of securing recoveries, but rather that of an inquiry into the treatment of these injuries, yet with different subjects and better surroundings it might also have been different.

The second class consisted of five that were shot and allowed to go without operative interference. Of these one recovered, one died of shock, two of hæmorrhage, and one of sepsis. In the one that escaped there is a strong probability that very slight if any injury occurred.

The third class consists of four resections after Wölfler's method, a partial resection of the liver, a partial resection of the spleen and one experiment upon the peritoneum, all ending in recovery. Lastly a final experiment with Senn's test.

Resulting from the foregoing paper, I beg leave to submit for further consideration, the following deductions:

I. In view of the uncertainty which attends these injuries exploratory laparotomy should in every case be boldly but carefully performed. The operator being in readiness to meet

any indication that the exigency of the case may demand.

- 2. Laparotomy in the linea alba is preferable to one performed in the course of the ball unless there are reasons to believe that the ball became arrested short of the peritoneum or its track infected, in which case incision and drainage should be employed.
- 3. Considering the objections against Senn's test as a diagnostic means of determining the necessity of a laparotomy the possible harm outweighs to such an extent the possible benefit that its general adoption is hardly justifiable.
- 4. The value of Senn's method in determining at the close of the operation the security of the intestinal tract is questionable, and still *sub judice*.
- 5. Large intestinal wounds not involving the mesenteric border are best treated by partial resections.
- Intestinal wounds upon the mesenteric border unless very small require a complete resection.
- 7. Where several large wounds are situated very close together a single resection including them all should be considered.
- 8. Partial resections of the liver, spleen or pancreas are feasible steps and .nay be required.
- 9. Suturing of both openings in wounds of the liver and spleen for the arrest of hamorrhage is advisable.
- 10. Excepting superficial lesions nephrectomy is the only procedure in wounds of the kidney.
- 11. Should obscure symptoms arise pointing to an early peritonitis the use of salines are indicated.
- 12. If suppurative peritonitis is established, early exploratory incision, drainage and disinfection of the peritoneum should be undertaken.